BOEHM-BAWERK ON VALUE AND WAGES.

In his extremely kind notice of my *Working Principles of Political Economy*, in the April number of this *Journal*, Dr. von Boehm-Bawerk expresses an unfavorable opinion regarding my treatment of Value and Wages. His suggestions as to a better mode of handling these subjects deserve attention. The appearance in English, promised for an early date, of his own great work* offers an opportunity for discussing the points he has raised. The *Positive Theory of Capital* aims to establish a new way of treating these fundamental topics. It is a book of very unusual character, and is likely to supply students of political economy with food for reflection for many a day to come. I think nobody who reads it can fail to admire the author's method, and the clearness, cogency, and steadiness with which he develops his views. His appeal throughout is to the visible facts of industry. By analysis of these and by reflection upon the results, he aims to make economic theory a sort of transcript and epitome of the industrial life of nations. Further, the tone of the work is as admirable as its method. The author finds himself at greater or less variance with almost every other economist, living or dead; but his criticism of other men's views is always so moderate, and so considerately expressed, that not even the most sensitive could take offence. The whole book is a model of scientific work done in the scientific spirit.

As to the modifications of theory for which the author contends, and especially as to the changed forms of statement he uses, I find myself unable in all cases to speak so highly. It does not seem to me that, as regards Value, he has succeeded in showing the old doctrines to be unten-

* *Positive Theorie des Kapitals.* Innsbruck, 1889.

able, or in giving us new doctrines that can be regarded as more satisfactory to take their place.

The primary object of his work is to establish a new theory of Capital and Interest; but in the course of his discussion he is under the necessity of touching on almost every part of economic theory. The essential features of his doctrines have already been very clearly laid before the readers of this *Journal* * by Mr. James Bonar, so that it will not be necessary for me to give here an account of the doctrine according to which interest depends on a difference of value between present and future goods. It needs to be remembered, however, that this doctrine goes with a different conception of value from that which American and English students ordinarily employ. Dr. von Boehm-Bawerk rejects the proposition that value depends on cost of production. He has adopted and worked out, with great fulness, the view that the value of every commodity depends on the lower limit of its utility, its *Grenznutzen*, or (as Jevons expressed it) its "Final Utility."

This doctrine is so complicated that I think no brief statement can do it entire justice. Those who would understand it fully, especially in its application to the theory of wages and profits, must be referred to our author's account of it. The object aimed at by the inventors of the new theory is to frame a law of value that shall apply to every transaction of the *do ut des* order between men. Such a law they find in the principle of Final Utility. In my humble judgment, the importance of the new theory has been greatly exaggerated by its advocates. After all has been said, they seem to me to have done little more than to put the familiar principle of demand and supply in a new and, as I think, less convenient form. As a fundamental law of value, it can hardly be regarded as an improvement on what we had before.

* In the issues of October, 1888, and April, 1889.

In the first place, it seems to me to ignore too much the true character of economic exchange, to which the law of value applies. It proceeds much as if every member of the community found himself, by accident, in possession of certain goods which he is desirous to exchange for other goods, provided he can do so on advantageous terms. He is willing to exchange with others only when the exchange brings him advantage; that is to say, when the thing he gets has greater utility for him than the thing he gives. Exchange is possible, therefore, only between persons who set a relatively different value on the things to be exchanged; and the more widely they differ in their view of the relative utility of the goods, the more easily and profitably they can effect the exchange. A has a horse, and B has wine. If, in his existing circumstances, A thinks the horse as good as ten kegs of wine, and B thinks ten kegs of wine as good as a horse, no exchange can take place. If, however, B's estimation be that a horse is as useful as eleven kegs of wine, exchange becomes possible. And in the exchange the value of the horse falls somewhere between ten and eleven kegs of wine. In the general exchange of commodities, the value of each is fixed by the estimation set upon it by those purchasers for whom it has least utility, their purchases being necessary in order to carry off the whole supply.

Now, this view of exchange, however much it may be elaborated, seems to me to be defective in a most vital particular. It does not keep in sight — certainly not sufficiently in sight — the true relation between economic exchange and the efforts of the individual to satisfy his wants. Under division of labor, the producer of each commodity is simply following the best method of obtaining the general assortment of commodities that he needs for comfortable living. To assume that his own product has for him any subjective value, as if he produced it with some thought of consuming it himself, is, to my thinking,

to assume a very unreal situation. The theory which connects value directly with cost has the great recommendation of putting at the front the important fact that exchange is simply a stage in the existing mode of providing for our individual wants. The doctrine that value tends to conform to cost is simply the assertion of the principle that men try to get the most they can for their industrial exertions. The new view does not deny this principle. It admits that experience reveals a correspondence between value and cost; but it seems to reject the theory that this correspondence is due to any control of cost over value. In the new view, the tendency of value to conform to cost is only an incidental case within the greater law of final utility. Cost is determined by value, not value by cost. The final utility of the commodity determines not only its own value, but the value of the materials and instruments used in the production of it; and the value of these materials and instruments constitutes the cost of the commodity. Thus the new doctrine finds between cost and value a relation directly the reverse of that which we have been accustomed to conceive.

The view of cost involved in this mode of reasoning has certainly abundant authority in the older writers. But later criticism has shown that we must distinguish between cost to the employer (or Cost of Labor) and the true or economic Cost of Production. No expounder of the law of cost would now define cost as "the sum of the means of production [*Productivgüter*] that must be used up in producing any commodity, — the portions of capital consumed, the labor, and so on." Much confusion has crept into economic discussion for want of a clear and consistent definition of cost; and Dr. von Boehm-Bawerk is, of course, not responsible for the misapprehension into which he here falls. Commodities do not cost both labor and capital, since capital itself is a product of labor. They do not cost both labor and wages, since wages are the reward,

and, in a way, the equivalent of the labor: to count both in the cost is to count the same element twice. Neither does true cost include both labor and abstinence, because the employer's abstinence results only in wages for his workmen; and there is the same objection to counting it in cost that there is to counting the wages themselves.

Looking at production in and by itself, it is obvious that the cost of every commodity consists only of labor; but the labor must be distributed in a certain way as regards time. The labor of the whole community could not produce a loaf of bread or a suit of clothes in one day. Production requires time; and the human burden involved in this requirement is the Waiting imposed on producers, after the outlay of labor, before the enjoyable result appears. Nobody has ever worked out this side of productive industry with greater clearness than Dr. von Boehm-Bawerk. I am accordingly somewhat surprised that he should have represented cost as consisting of labor and capital. His whole system implies that the cost of every commodity is the labor and waiting required for producing it.*

Now, if we hold fast this idea of cost, the admitted correspondence between value and cost will have to be accounted for in a different way from that adopted by our author. We can hardly say that the value of the product determines the value of the cost, since the cost consists wholly of burdensome effort, of sacrifices undergone to obtain the product. Yet I am by no means sure that Dr. von Boehm-Bawerk would not regard even Waiting as a

* It is necessary to have a name for the element of cost that answers to the need of time in production. I have used the word "waiting" as the name for this sacrifice on the part of producers. It is the simplest and most suitable designation that occurs to me. Dr. von Boehm-Bawerk says: "The disadvantage that goes with capitalistic modes of production consists in a *sacrifice in point of time* [*ein Opfer an Zeit*]. The circuitous methods of capital are fruitful, but time-consuming; they yield more or better product, but not till a later point of time" (vol. ii. p. 87). The idea here is the same that I have tried to express by the term "waiting." See this *Journal* for July, 1887, p. 481.

species of "goods," and would not assign to it the attribute of value. He constantly speaks of labor in this way, classing it, as "productive goods," with materials, implements, machines, etc. It is evidently not without reason that one who includes so wide a range of things under the head of commodities should wish to find a law for their value independently of cost of production. His list of goods includes too many things for which no cost could be assigned. Who can say what the cost of production of a day's labor is?

It may be, then, that those who take the new view of the connection between value and cost would still adhere to their doctrine, even if they accepted the corrected definition of cost. Yet it is difficult to see wherein they would improve thereby the character or the significance of economic doctrine. The statement that "the value of the cost is determined by the value of the product" does not seem to me to convey much, or indeed any, light. Holding that material commodities alone have true exchange value, that these belong to a wholly different category from the human exertions by which they are produced, and that the relation of product to exertion is that of reward, and reward only, I am unable to conceive of the attribute of exchange value as belonging to the cost of products. That would be to regard producers as carrying on a kind of exchange with nature, giving productive exertions in return for commodities. If we are ready to look on production in that way, we may of course speak of the exchange value of cost; and, since every commodity is always obtainable for the cost of producing it, there would be no doubt as to the exact equality in value of the cost and the product. But this way of looking at things does not seem to promise very useful results.

The connection between value and cost, if admitted at all, would seem to call for a different sort of recognition from that accorded to it by the new theory. Looking at

economic exchange as a continuous process, what explanation does final utility afford of the broad, permanent features of exchange? Apart from cost, why should an ounce of gold ordinarily have as great value as a ton of iron, a watch as great value as several pairs of shoes, a diamond as great value as many barrels of flour? The answer of the new theory seems to be that in each "concrete case" all the attendant circumstances are taken into account in fixing the final utility of each commodity. But, if this means that the cost of each article is one of the circumstances going to make up the concrete case, the answer seems to involve a begging of the question. The principle of cost is too broad to be admitted by a side door, or as an after thought. If the reason why coats have a higher value than shoes be that coats have a greater final utility, that ought to be the end of the story. To add, as an incidental circumstance, that coats are also more difficult to make, and so ought to have a higher value, has the appearance of putting the controlling factor in a curiously subordinate place. This is especially so when it is admitted that an invention which should reduce the cost of production of coats below that of shoes would have the effect of reducing their final utility also below that of shoes.

At the same time I have no wish to underrate the importance of the Final Utility principle. It may have undoubted significance for economic theory, but in a different direction, as it seems to me, from that which its advocates indicate. As a fundamental law of value, I think it can never satisfy critical readers. It must always, in the case of things producible at will, fail to explain anything more than the fluctuations of their value about the central point fixed by cost. But there is a field in which it may perhaps be turned to good account. We have as yet no satisfactory treatment of what may be called the proportional demand for commodities and the

changes to which it is subjeet. As I read Dr. von Boehm-Bawerk's exposition of the new doctrine, it seems to me that he is really not explaining why commodities exchange for each other in certain proportions, but is dealing with the question why, as between things having the same cost, men choose the one rather than the other, or choose to have much of the one and little of the other; why, when its productive capacity increases, a community chooses to enjoy its increase of spending power in certain forms rather than in other forms; why, in a word, the proportional demand for commodities is what it is. Here, if anywhere, the doctrine of final utility would seem to have a place.

The question whether labor is or is not properly to be regarded as a class of goods with an exchange value, a "ware" which men buy and sell for a "price," suggests the other great topic we have to discuss; namely, the theory of Wages. At the outset, I wish to say that, as regards the substance of the author's handling of the wages problem, his work seems to me admirable. He has shed a flood of light on every nook and corner of the subject. But, as regards his mode of using and interpreting the results of his inquiry, candor compels me to say that, in my judgment, he has not followed the best course. In his view, the phenomena of wages and profits (and rent as well) are all to be referred fundamentally to a single and very simple law; namely, the low value of future goods as compared with present goods. The employer, in hiring laborers, buys future goods in exchange for present goods. As time passes, the future goods so purchased rise in value as we approach them; and this rise of value constitutes the profits of the employing class. The level of wages at any given time depends on the quantity of present goods offering for future goods, as compared with the number of laborers offering future goods for present goods; that is, offering to be hired.

But this simple principle is very complicated in its practical operation, because it is necessary to discover what determines, in any given case, the quantity of present goods offering for a given amount of labor. On the effort to solve the difficulties of this question the author has evidently spent a great deal of study. His reasoning must be read in full, in order to be justly appreciated. In outline, it is as follows. The nature of industry is such that circuitous methods of production yield larger returns for labor than direct methods. Within limits, the longer time a community spends in preparing implements, machinery, and natural agents, the more its labor will yield; but beyond a certain point experience shows that the increase of product is in a lessening ratio to the increased length of time devoted to providing capital. For the purposes of his discussion the author assumes, as a working example, the following scale of productiveness. By productive period, it should be explained, he means the length of time that, on the average, elapses between the outlay of labor and the completion of the enjoyable product towards which the labor is directed. A productive period of one year means that, taking the average of its industries, the community expends its labor a year in advance of obtaining the product, a two-year period two years in advance, and so on.

Productive Period.	*Yearly Product for each Laborer.*	*Increase.*
1 day (no capital), ...	$150	
1 year, ...	350	$200
2 years, ...	450	100
3 "	530	80
4 "	580	50
5 "	620	40
6 "	650	30
7 "	670	20
8 "	685	15
9 "	695	10
10 "	700	5

If, now, the accumulated wealth (other than land) of the community be 15,000 millions of dollars, and the number of laborers be 10 millions, how is the level of wages determined? The author answers this question by showing that, with a given stock of wealth and a given number of laborers, wages will depend on the length of the productive period adopted by the employers. But the productive period most profitable for the employers depends in turn on the rate of wages they must pay. If laborers can be hired for $300 a year, the most profitable period, under the scale of returns assumed above, would be three years.* But the resources at hand are much more than sufficient to provide this rate of wages for 10 million laborers for a three-year period. The unsatisfied demand for labor would cause wages to rise. The rise of wages, however, changes the situation: a three-year period ceases to be the most profitable under the given scale of returns. If wages should rise to $600 a year, the most profitable period would be eight years. But for an eight-year period the existing stock of wealth is insufficient to provide this rate of wages for the whole number of laborers. Therefore, neither so high a rate of wages nor so long a productive period is possible. Thus, by the ordinary operation of commercial principles in presence of the existing conditions of production, a rate of wages and a productive period are evolved, under which the whole body of laborers, and the whole stock of means for the

* That is to say, an employer having $10,000 to invest would gain highest profit in the given conditions by employing twenty-two men on a three-year basis rather than thirty-three men on a two-year basis or seventeen men on a four-year basis. This is a matter of arithmetic. Those who wish to test it must bear in mind the author's principle, that only about half of the amount necessary for paying wages during a given productive period needs to be accumulated in advance. The wages of twenty-two men for three years, at $300 a year, would be about $20,000. Owing to the fact that production proceeds by stages (*Staffelweise*), a subsistence fund of $10,000 would, in the author's view, answer for twenty-two men on a three-year basis, wages being $300 a year.

payment of wages, are brought into active employment. The demand and supply of present and future goods are brought to an equilibrium.

This reasoning has obviously a resemblance to the doctrine of the wages fund, as indeed the author himself points out. It is, however, less rigid, and gives a more intelligent account of its own working in practice. It has in common with the old doctrine the fundamental principle that wages are an advance, and are at all times limited by the resources available for making advances. But the expounders of the old theory never sufficiently considered the full meaning of the truth that all capital, so far as regards its particular form at any moment, is perpetually consumed, and sooner or later has to be renewed in all its parts through the payment of wages. If they had, they would not have been content to say that wages depend on capital, without some effort to take into account the circulating period of the capital. This gap in their structure has now been amply filled. Not that the author of the *Positive Theory* can be truly said to have merely adopted and completed the work of the older writers. All that he has written he has evidently worked out for himself and in his own way. The analysis he makes of the phenomena connected with wages cannot be too highly spoken of. It leaves little for future writers to do but to follow, and this whether they accept or reject his cardinal principle of an exchange between present and future goods. When all writers on economics shall be ready to adopt, as frankly and conscientiously as he has done, the method of careful observation and analysis of the facts, we may hope for better agreement and more rapid progress in the development of economic theory.

Greatly as we must admire the method and general purport of the *Positive Theory*, there are some points of detail in which the procedure seems to me to be open to criticism. In the first place, I must avow some doubts as to

the entire validity of the author's arithmetic in the treatment of wages. The assumed scale of increase in the productiveness of labor, as the proportion of capital to laborers is increased, opens up a wide question of fact. The author appeals to experience in support of the principle involved, and that of course is the only evidence by which the matter could be determined. But the facts he adduces are not, in my judgment, sufficient to establish the very broad generalization he bases on them. The examples he gives are not simply cases of increased capital, nor simply of lengthened productive period. They are cases of introducing new inventions. Axes of steel are introduced for wood-chopping instead of axes of stone; elaborate blast furnaces and axe factories take the place of the simpler arrangements by which axes were formerly made; guns are introduced in hunting instead of the bow; nets and seines take the place of less costly contrivances for catching fish. The author alleges that the later additions to capital, in such cases, do not add as much to the productiveness of labor as the earlier ones. He also states with confidence that there is no branch of industry whose productiveness could not be materially increased by skilfully chosen prolongation of the productive period; and this without any new invention, but simply by the introduction of long-known devices. He adds, "How far is most of our [Austrian] agricultural and other industry behind the most advanced industrial models; and certainly these latter are themselves not less widely removed from an ideal, really complete equipment."

There seems to be, in this reasoning, a combination of two very distinct cases. The examples are hardly in line with the principle which they are used to introduce. The examples relate to new inventions, the conclusion to old ones. The invention of improvements in production goes on apace in the world. Later improvements may not increase production *in the same ratio* as earlier ones: the

second doubling of a thing that has already been doubled is always harder than the first. But it does not seem to me that that settles the principle contended for. If the existence of the scale depends at all on the coming of new inventions, we have no right to argue as if the whole range of the scale were open to investors every day. Any lengthening of the productive period must be made within the limits of existing industrial knowledge. As regards the more extended use of existing improvements at any time, we may undoubtedly assume a degree of elasticity. But whether, with a given number of laborers, this elasticity is as great as we are asked to believe; and whether, independently of the law of diminishing returns from natural agents, the additions to capital must fail to add correspondingly to the product, are questions of fact which I do not feel competent to answer. I have been accustomed to suppose that in any given state of our industrial knowledge there is a best way of setting about the production of every commodity,—one way that gives larger product for a given outlay of labor and waiting than any other. This way I have supposed to be best for all concerned, quite regardless of the rate of wages,—best because it is the way of least cost. The method of production that gives each commodity at lowest cost I have supposed especially to be the one best for the employers, quite regardless of the rate of wages. And this I have taken to be the common belief among practical business men as well as among economists. It is certainly not clear why the use of the most effective modes of production, to the full extent of the community's industry, should not increase the product *pari passu* to the limit. Neither is it clear to me how changes in wages could alter the interest of the employer in the choice of methods. The new theory, however, seems to assert that there is a descending scale in the increase of product obtainable by more extended application of each improvement, and that the

point of most profitable use depends on the rate of wages. If the proposition be true, it is a most interesting and important truth; but it seems to me to need stronger evidence for its support than has yet been supplied. I suspect that, in part, it is simply the familiar doctrine of diminishing returns from natural agents; but it evidently goes much beyond that doctrine.

A word of explanation may be needed here. The way of least cost seems to me to determine the mode of production at all times. But the way of least cost to-day may not seem the way of least cost a hundred years hence, even though no industrial improvements should be made meanwhile. Cost has two elements, and any change in the relative estimation of the two in the minds of those who bear the burdens of production, may have the effect of changing the line of least cost. An increased willingness to make the *Opfer an Zeit*, a readiness to submit to waiting for a less inducement than before, may result in increase of capital wherever the change opens up a new mode of least cost in the production of any commodity. If this be our author's meaning, the principle may be readily assented to. But I do not so understand him.

The question before us suggests the objection raised by Dr. von Boehm-Bawerk * to the view of wages presented in my book. I avowedly treated wages, as well as the profits of employers, from the standpoint of the enjoyable results of industry. It was my view that the important question in regard to every industrial arrangement is how it affects the quantity of enjoyable commodities accruing to each and all of the men who are concerned in it. This is still my view. Therefore, the problem of wages seems to me still to be contained in two questions: first, What determines the amount of enjoyable product at the disposal of the community from week to week? secondly, What determines how large a part of this total product

* In this *Journal*, April, 1890, p. 335.

shall go to hired laborers? But the objection is made that the total product of a community's industry during any period includes not merely finished enjoyable commodities, but also materials and machinery for the production of future commodities. The laborers, it is urged, may choose to take as their pay, in greater or less part, these materials and machinery. From my point of view, the answer is simple. So far as laborers take machinery or other capital as the reward of their labor, they work for the future, they become capitalists. Though they may have been hired laborers in form, they have not been such in substance. The true reward of their labor will come to them later, when their capital results in enjoyable commodities. When that time comes, their share in the enjoyable product of the community's industry will follow the general principle: it will be greater for their present self-denial. They will have both the reward of labor and the reward of waiting. But they cannot have both wages now and that future reward later. The case therefore seems to me to have been fairly well covered by the general principles stated in the earlier portions of my book. In a small book on a large subject, one has to leave many subordinate things unsaid that a full treatment would include.

Further, if one were professing to follow out the consequences of every possible variation in the use laborers make of their money wages, one would have to go much beyond the point indicated by this objection. For, obviously, laborers may buy land or other natural agents as readily as "capital goods"; yet Dr. von Boehm-Bawerk, in his own treatment, expressly excludes land from the body of wealth acting on wages. Again, some laborers may save from their money wages the means of hiring other laborers. In fact, my impression is that this rather than the purchase of "capital goods" is the form in which saving by laborers takes effect in actual practice.

If this be true, the immediate consequence of such saving, if it be a new thing, must be found in a change of the wages of other laborers. Whether it shall or shall not increase the working capital of the community would depend on the particular circumstances of each case. It might conceivably affect only the ownership, and not the amount, of the community's capital. Even on the wages of labor, the effect might be only temporary, since the attendant fall of profits might check the flow of savings from some of the old sources. At all events, in all these cases we seem to me to have, not contradictions of the law of wages, as I have tried to state it, but rather reminders of the presence and simultaneous action of a law of profits and a law of rent. The business arrangements of every country make it easy for the individual to choose the form in which he shall take the reward of labor; but this seems a poor reason for attempting to formulate a law of wages that shall be also, in part, a law of profits and rent. Shall we not have sufficiently dealt with the problem of wages when we shall have satisfactorily treated the case of those who work for wages pure and simple? And in their case is not the question, for any given time and place, one that relates to the enjoyable product of industry then and there offering for the payment of wages?

Returning to our author's own treatment of these subjects, it seems hardly probable that the form in which he states his central principle will receive unqualified approval. It goes without saying that the average of mankind think more of the present than of the future; or, perhaps better, that men concern themselves more about the immediate future than about the more distant future. But to make this elementary commonplace the basis of a whole economic philosophy seems to me a very unfortunate choice. There is, I think, nothing in the idea that could not have been quite clearly expressed in other

ways. Carried over into the theory of value (and prices), it seems to me to introduce new elements of difficulty and confusion into a region already sufficiently charged with those qualities. To be quite frank, Dr. von Boehm-Bawerk has failed to show, I think, that we should gain anything by treating questions of wages, profits, and rent as questions of value. On the contrary, it seems to me clear that we should lose much.

In the first place, we need a treatment of the principles governing the exchanging ratios of products actually in the market. We need a name for the quantity of other products any given product will exchange for, both the thing sold and the thing bought being actually present and delivered. We need other names and other treatment for those dealings between men in which actually present commodity is given, not for another product also present, but for a service or consideration of some other kind. If we had not separate names for buying and hiring, for lending and selling, we should have to invent them for the sake of clearness. Having them, we ought, equally for the sake of clearness, to keep them distinct. Yet this new way of speech, in which the hired laborer sells future goods, and the source of the employer's profit is the low present value of the future goods he buys, asks us to abandon the advantage our existing economic vocabulary affords. If we should adopt it, we should hereafter have to explain ourselves whenever we mentioned value, telling whether we meant value in immediate exchange, or in exchange for goods of the future, or a mean of the two. The value of a commodity might change in the one sense, but not in the other. In the new sense, the value of every commodity would fall if wages should rise. But this is a change that would not be felt by buyers and sellers in the ordinary market, since it would not necessarily affect prices at all.

This objection may be put in another way. The value

of every commodity, in economic exchange, is expressed in terms of other commodities. In the new sense, the value of each may be expressed in terms of itself. "The value of a bushel of wheat is a bushel and a half of future wheat" becomes, under the new phraseology, a perfectly legitimate expression. I cannot think that the author has disposed of Knies's objection on this head. It seems clear that the new doctrine involves a radical change in the definition of value.

The objection on the ground of mere terminology, serious though it must be considered, is far from being the chief objection to the author's method of dealing with the relation between wages and product. The conception of value involves, as I suppose, the notion of a definite quantity of commodity on each side of the exchange. The value of a bushel of wheat is the definite quantity of any and every other commodity for which it may be exchanged. But, in this assumed exchange of present for future goods, definiteness on the side of the future goods is impossible. What the employer actually obtains is services,—physical and mental exertion of a specific sort on the part of the laborer. He gives in return, no doubt, a definite quantity of present commodities; but there are many causes of uncertainty as to the quantity of similar commodities he can obtain later in return. Neither employer nor laborer can know exactly how much of the single commodity they produce the labor will result in. Secondly, neither of them can know exactly what the value of the product will be when completed,—how much it will exchange for in terms of that general assortment of commodities that the wages include. How, then, shall a relation of value be predicated between present wages and future product? The *agio* of which the author speaks can have nothing of the definiteness that belongs to a real *agio*. The employer pays the wages and takes his chances.

This element of uncertainty alone seems to me to exclude the relation of value, in the case. But, even if the product could be quantitatively determined in advance with precision, I should still think it inadmissible to speak of the laborer as giving future goods in exchange for present goods. In a strict sense, in any sense that scientific precision could admit, he gives nothing of the sort. Neither does he even give the means of procuring future commodities. All he has to offer is his labor, and labor is but one of the requisites of production. Even if he offered natural agents as well as his labor, it would still be inexact to speak of him as offering future goods; for shall we forget the employer's own services in production?

The whole attempt to interpret the relation of product to wages as a case of value seems to me an unfortunate error of judgment. The old view, which saw only a quantitative difference between them, seems to me the sound and natural view. The excess of product over wages, of which we have been accustomed to speak, presents a definite and tangible conception of the source of profits. The excess is regarded as ascertainable by physical measurement after the return is realized in full,— so many yards, pounds, bushels, more than the laborers received as wages. And there is no suggestion that it could have been known in advance. Since the commodities paid as wages were the same in kind as those that constitute the product, the relation of value can hardly be predicated between them, viewed as aggregates of wealth. What employers strive for is increased quantity of wealth. All the circumstances that enable them to obtain such increase may be analyzed and described with entire clearness, as it seems to me, without carrying over into the field of investment and return ideas and phrases that belong properly to the field of economic exchange.*

* The question *how* capital yields income, to which our author devotes so much space, can never be difficult for one who has mastered the obvious distinction, so well brought out by our author himself, between savings and working capital. Savings as such produce nothing: abstinence in itself produces

To speak of the value of commodities that are not yet in existence is to employ a mere figure of speech. To speak of their value increasing as they approach existence, and to represent this increase of value as the source of the profits of employers, seems little short of indulging in merely fanciful language. Here, as elsewhere in political economy, we need to use a terminology that shall adhere closely to the observable facts. It seems to me, therefore, matter of regret that the author of the *Positive Theory* had not given us the results of his powerful analysis and reasoning in terms more in keeping with the simple facts and more consonant to the well-established usage. He evidently, but as I think mistakenly, considered it desirable to bring all economic transactions between men under one and the same law. To do this, he seems to have seized upon the common feature of give-and-receive, and the common motive of self-interest in all such transactions, as furnishing the key to all economic questions. To minds that crave all-embracing generalizations, this point of view may have great attractiveness; but it is not easy to see how we can hope for practical or theoretical advantage in that direction. The occasion that gives rise to economic exchange of products differs *toto caelo* from that which gives rise to working for hire and the investment of savings. The common feature of give-and-receive seems to me to be but a superficial coincidence. If we attempt to couple in one formula things so divergent in all their essential features as the giving of labor for goods and the giving of goods for goods, our formula, as I think, must either be devoid of significance, or must be untrue, on the one side or the other, to the real nature of the phenomena it is intended to explain.

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nothing. Savings are only for the payment of wages in advance of product. They are no part of the apparatus by which the product is brought into existence. But the employers, who advance the wages, own the product when completed, and, as already stated, the excess of the product over the wages paid out in the course of its production, constitutes the employers' profit. This is so simple that he who runs may read. Why obscure the clearness of it by raising a question of value in the case?